

Overview

The contents in this replication package include the data and code used to reproduce the results, figures, and tables.

Data

India.csv contains five variables

village_id: village identifier

alloc: treatment assignment mechanism

hassign_final: treatment (we dichotomize it in the analysis)

vsthospE_1: midline hospitalization

overnightsrs_2: endline hospitalization

Code

analyze2SRE.R contains all the functions for applying our methods.

Test2SRE: test the null hypothesis of no direct effect, no spillover effect, and no average direct effect

Calsamplesize: calculate the required number of clusters using the sample size formulas.

simulation.R runs the simulation study.

plot_simulation.R generates the figures in simulation study. It uses the simulation result saved in simulation.RData

realdata_india.R generates the result in the real data analysis and produce Figure 1 in the main text.